THE SNAKE PLAIN WEATHERVANE

Volume 6, Issue 1 May 2013

National Weather Service Pocatello, ID

Proudly Serving East Idaho and The Central Mountains

Inside this edition:

Summer 2013 Outlook

By Mike Huston
Lead Forecaster

The precipitation outlook for early summer (May-Jun-Jul) 2013 indicates an elevated chance for below normal precipitation for Idaho (Fig. 1, brown area) and is derived largely from a consensus of weather model forecasts for that time period. Enhanced odds for below normal precipitation are expected to continue through the summer (not pictured) in anticipation of a suppressed southwest monsoon season which typically emanates from the Gulf of California and/or Gulf of Mexico.

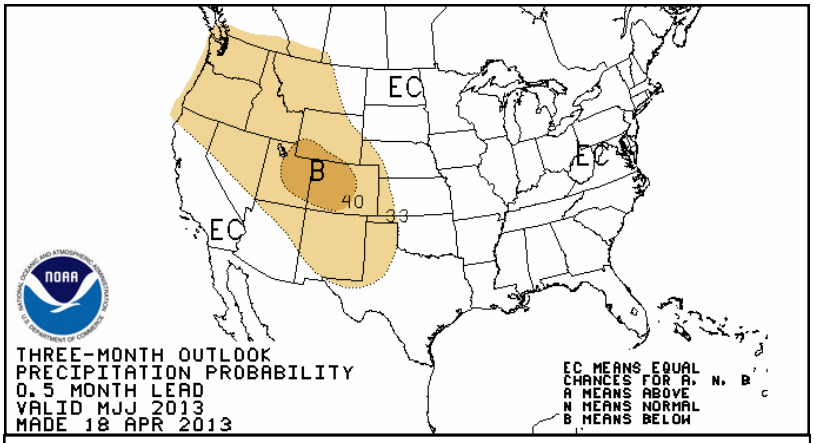


Figure 1. Precipitation Outlook for May, June, July

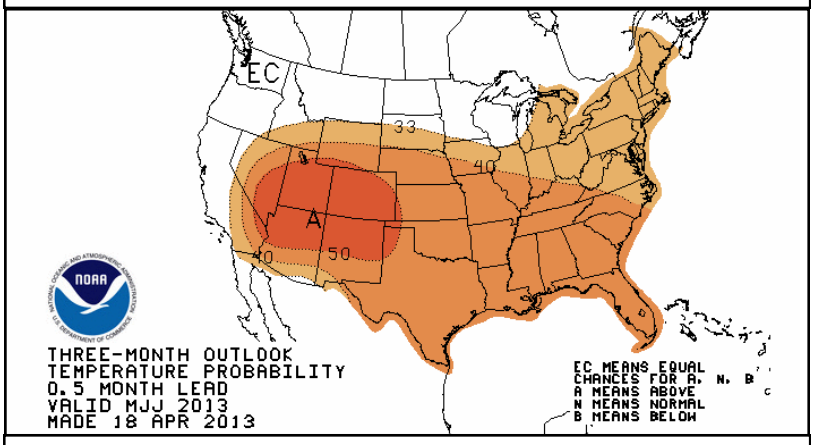


Figure 1. Precipitation Outlook for May, June, July

The temperature outlook for spring (May-Jun-Jul) 2013 calls for enhanced chances for above normal temperatures across the southern tier states (not pictured) gradually spreading north and west into Idaho during the early summer months (Fig 2, red-brown area). These anomaly forecasts are largely consistent with model forecasts for the time period as well as observed decadal (10-yr) trends. Substantial soil moisture deficits (drought) over much of the south-central states and southern Great Basin also serve as a harbinger of above normal temperatures expected during the warm season which will likely extend into fall (Sep-Oct-Nov).

A Weather-Ready Nation
By Vern Preston
Warning Coordination Meteorologist

The National Weather Service's (NWS) desire to provide world-class weather information to our citizens has led to an initiative to help our local, state and national communities be prepared for all types of weather hazards. Our mission to save lives, property, enhance our economic development and provide protections for our environment has led to a program called "Weather-Ready Nation." We want to increase the nation's weather-readiness by being prepared, mitigate, respond and recover from weather-related disasters.

Who is involved in Weather-Ready Nation?

Society's ability to prepare for natural disasters requires a societal response equal to the risk. Government cannot do this alone, which is why the NWS is leveraging its vast nationwide network of partners, and incorporating new partners who are beginning to share the vision of building a Weather-Ready Nation. Partners include other government agencies and emergency managers, researchers, the media, insurance industry, non-profits, the private sector and more.

Is America becoming increasingly vulnerable to weather events?

The increase in the severity of impacts is attributable to societal changes represented in demographic trends, growing infrastructure threats, and an increased reliance on technology. U.S. population has almost doubled since 1954, which corresponds with higher property and infrastructure values. Trends such as urban sprawl and conversion of rural land to suburban landscapes increase the likelihood a tornado will impact densely populated areas.

More overlap in the U.S. economy means that a single weather event can have a significant effect on several industries. In fact, according to a study by the National Center for Atmospheric Research, weather can vary the economic output in the U.S. by $485 billion of the country's GDP annually. The study goes on to say that weather events affect "economic activity in every state and every sector."

What are the specific new NWS measures Weather-Ready Nation will include?

The initiative includes several operational initiatives in every area of our work, from observing current conditions to increasing lead times on severe weather warnings to improving how we communicate our forecasts to the public.

We are upgrading our radar and satellite technologies, deploying mobile forecast teams, and developing actionable forecasts for the public. This means we're not just improving the precision of risk forecasts; we're communicating that risk more effectively through investment in social science research.

Since being weather ready is a collective effort we're also leading a National Dialog to reduce risk and increase community resilience for future extreme events. The dialogue kicks off with a partner workshop/ symposium scheduled for December 2011, in Norman, Okla. The participants will identify, prioritize, and set in motion actions to improve the nation's resiliency against severe weather, especially tornadoes.

Fire Season Is Just Around The Corner

By Bob Survick

Incident Meteorologist

Mountain snow packs in the Big Lost, Henry's Fork and Teton Basins have faired pretty well this past winter. As of April 3rd, those areas are about 92-96 percent of median value. Much of the remainder of southeast Idaho is not doing as well. Around Bear Lake the snow pack is only 60-70 percent of the 30 year median. In Figure 1, the Snow Water Equivalent (or liquid water content of the snow after it is melted), at Morgan Creek shows the snow pack by April 1st has reached it's peak and is decreasing sharply (blue line). This is 1 to 2 weeks faster than the 30-year median (purple line) and several days faster than last year (green line). This suggests the snow pack at Morgan Creek could be gone about the third week of April and fuel conditions for wildland fires may be ready to burn two to three weeks early this year. The year 2011 (red line) was a very mild year, deep snow pack lasted close to three weeks longer than the median timing.

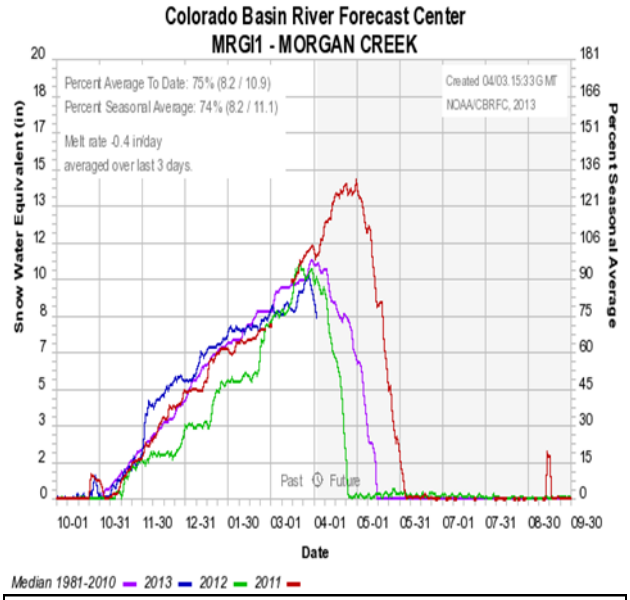


Figure 1 Snow Water Equivalent at Morgan Creek SNOTEL site, elevation 7600 feet and located about 22 miles north of Challis, Idaho.

The snow monitoring station at Franklin Basin, about 15 miles east-southeast of Preston shows minimal snow pack that is keeping pretty close track with last year.

Long term outlooks for precipitation issued by the Climate Prediction Center currently call for below normal precipitation for portions of the Idaho central mountains and southern areas of the state continuing well into the summer months. Having said this, there is still at least an average chance of new wildland fire starts from thunderstorm and lightning events associated with the Southwest Area Monsoon.

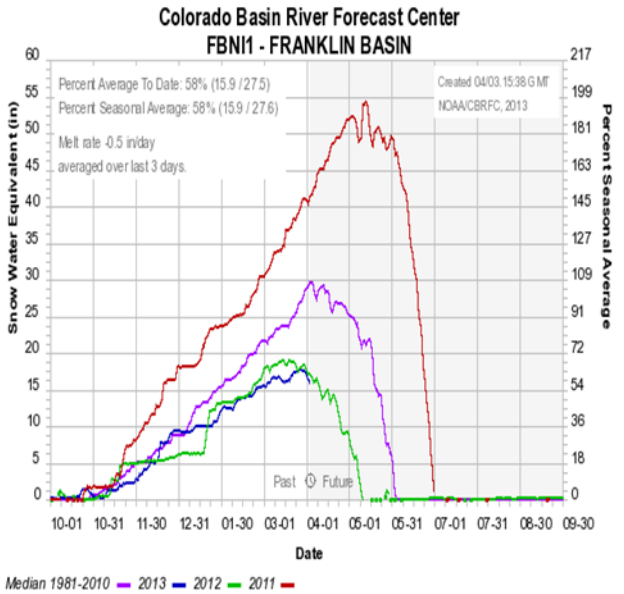


Figure 2 Snow Water Equivalent at Franklin Basin SNOTEL site, elevation 8170 feet and located about 15 miles east-southeast of Preston, Idaho.

The monsoon season typically runs from the middle of July through the middle of September. This leaves the door open for a potentially active fire season again this year.

Monsoon moisture surging northward through The Great Basin, for periods of 2 or 3 days at a time, also brings the potential for flash flooding on ground prone to rapid run off. The numerous wildland fires in Southeast Idaho last summer have left behind large areas of bare black ground that now contain hydrophobic soils. Heavy down pours will tend to run off rapidly rather than soak into the burned over ground and this poses a threat of mud and debris slides harmful to both people and property. These conditions can persist for several years following a wildfire, until regrowth has a chance to take place. The Salmon –Challis National Forest reports

rocks and other debris from the Mustang Fire have been sloughing onto the 55 mile stretch of Salmon River Road.

As spotters you can report flash flooding or mud and debris slides, and possibly help provide warning to others that may be in the path of this danger. Figure 3 shows where some of the more notable fires occurred in 2012.

Figure 3 Wildland Fires from 2012 in Southeast Idaho.

Upcoming Hazard Concerns

For May into June wind, flooding, and thunderstorms are the main weather concerns.

Report the Following Winds, Flooding, & Thunderstorm Hazards by:

Calling 1-800-877-1937 or Emailing Pih.Spotter@noaa.gov

Wind: Report winds mainly over 40 mph and higher.

Focus on reduced visibility from blowing dust and wind damage like trees blown over and size of broken branches.

Flooding: Report any type of river flooding as well as mud and debris slides.

Thunderstorms: Report rotating wall clouds and tornadoes.

Report any hail. Focus on size, damage, and amount on roads.

Report strong outflow winds and damage.

Report heavy rain rates, like ¼ inch in one hour.

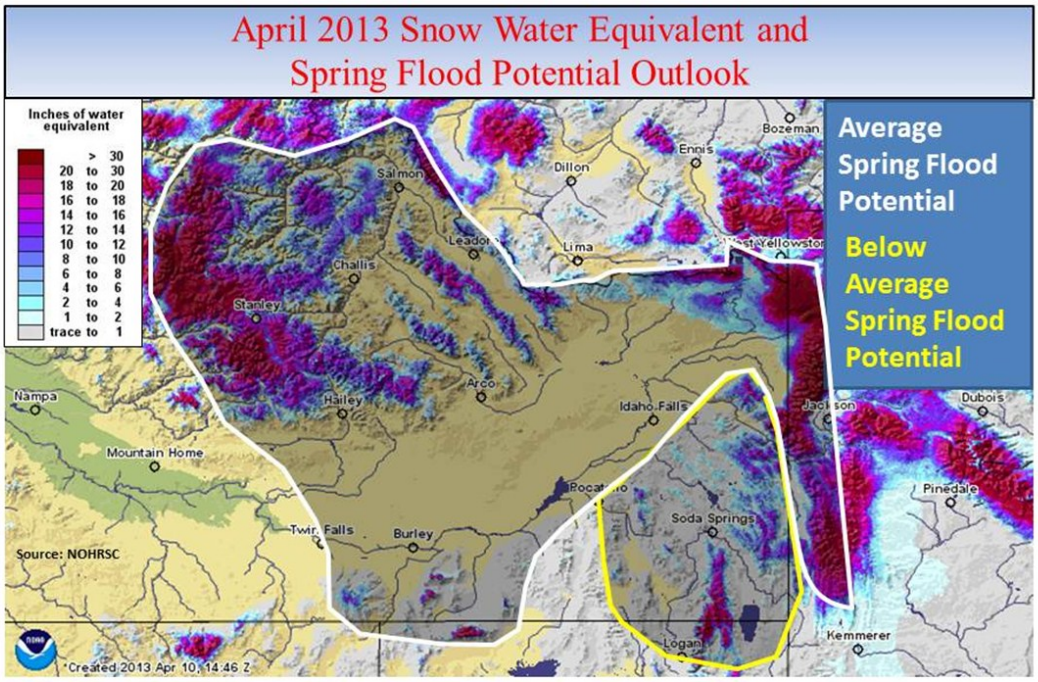
Eastern Idaho Spring Flood Outlook
By Corey Loveland
Service Hydrologist

Greetings! I am the new Service Hydrologist at the Pocatello Weather Forecast Office. I came from the West Gulf River Forecast Center (part of the National Weather Service) in Fort Worth, TX and have been here since June of last year. I am excited to be back in my home state and be of service to the public for hydrologic services in eastern Idaho.

The 2013 Water Year (beginning October 1, 2012) started off looking quite promising as a number of fall storm systems brought abundant rain in the valleys (and lower mountain elevations) and snow in the southeast Idaho mountains, particularly to the south central mountains including the Little Wood and Big Lost River basins. However, abnormally high elevation and deep snow accumulation during some of these early in the water year storms left a large snowpack deficit across low to mid-level elevations across southeast Idaho basins. Low elevation snowpack is very important in assessing flood potential.

Currently, mountain snowpack is below normal across most of southeast Idaho with most low and mid elevations melted out as much as 3 weeks earlier than normal as a result of recent warm temperatures. Overall, precipitation in the region has only been about half of normal since January. Snow accumulation has peaked, and any additional snow accumulation will likely be minimal. Therefore, the risk of spring flooding is generally near average across most basins and below average in the Bear River basin.

Reservoirs across southeast Idaho are generally holding average to below average volumes of water. Water supply for irrigation may be tight for the following reservoirs: Magic (holds about 45 days of irrigation), Jackson Lake and Palisades (may not fill due to last year's demands), Oakley (approximately 5,000 acre-feet short) and Bear Lake (similar to last summer). Based on the current snowpack situation and long term weather outlooks, there will be adequate reservoir space to accommodate the continuing spring runoff. Some reservoirs provide the function of reducing spring flood threats in the headwaters of basins as well.



As warmer weather continues, remember that spring flooding is often the result of spring rains combined with seasonal snowmelt with warmer temperatures. It is not always possible to forecast specific rain storms, or rain on snow events more than 4 to 7 days into the future. Therefore, short range river

forecasts should be monitored closely if a rain event or unseasonably warm temperatures occur. Details regarding possible or resulting flooding will be available in short term outlooks, flood watches and flood warnings issued by the National Weather Service.

Water supply forecasts issued by the Northwest and Colorado Basin River Forecast Centers (RFC's) are issued frequently, nearly on a daily basis, as well as first-of-the-month spring streamflow volume forecasts and water supply outlooks published by the National Resources Conservation Service.

Northwest RFC: www.nwrfc.noaa.gov/rfc

Colorado Basin RFC: www.cbrfc.noaa.gov/

Idaho NRCS-Snow Survey: www.id.nrcs.usda.gov/snow

Spotters, we need you!!

This spring, increase your spotter vision to include the rivers as well as the skies. Please call the Pocatello Weather Forecast Office (WFO) when and wherever you see flooding and please include the following information:

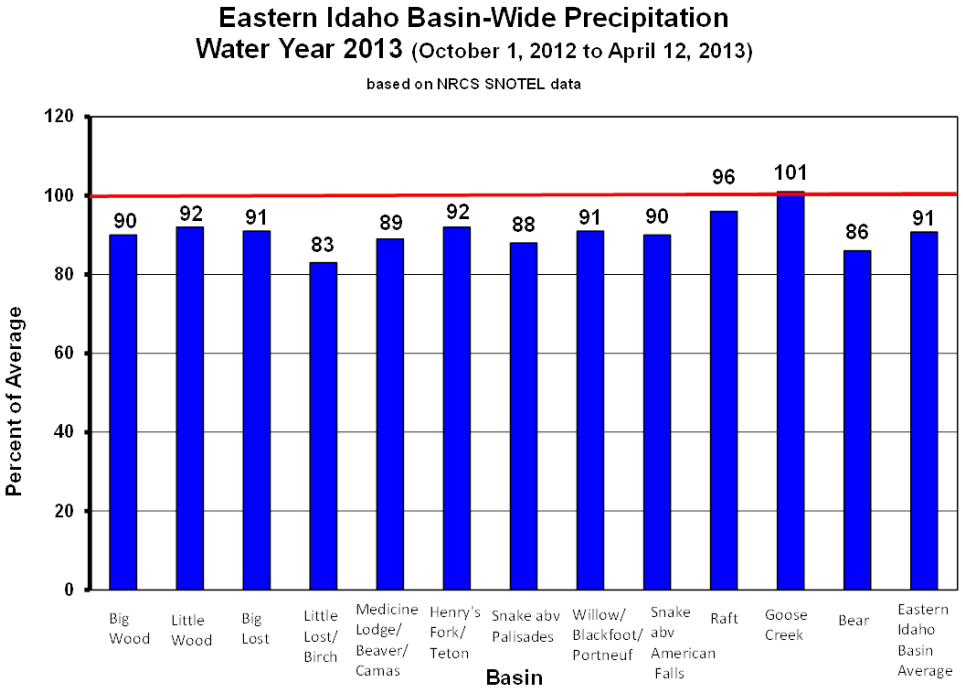
River/Stream name
Nearest town
County
Road and/or highway or bridge information
Damage/extent of flood
Debris or ice jams
Injuries and/or deaths
Photos

With your spotter skills looking to the rivers, you will help the Pocatello WFO carry out its mission to protect lives and property!

If you have something to report: Please call the Pocatello National Weather Service 24 hour weather spotter number:

1-800-877-1937

Thank you and enjoy Spring!



New Director of the National Weather Service
By Rick Dittmann
Meteorologist-In-Charge

NOAA recently announced the selection of the National Weather Service's (NWS) 16th Director. Dr. Louis Uccellini, Ph.D., assumed our Agency's leadership role February 10th, 2013.

Dr. Uccellini was previously the Director of the NWS National Centers for Environmental Prediction in College Park, Maryland. A position he held since 1999. He began his weather career at the Goddard Space Flight Center's Laboratory for Atmospheres as their section head for the Mesoscale Analysis and Modeling Section in 1978. He joined the National Weather Service in 1989 as the Chief of the Meteorological Operations Division. He became Director of the Office of Meteorology in 1994.

FEMA Administrator, Craig Fugate said, "I congratulate Dr. Uccellini and look forward to continuing to collaborate with him and the National Weather Service. FEMA and NWS in partnership together prepare communities and local officials for the impacts of weather hazards to save lives and protect property."

Added, Dr. Uccellini, "Working with a spectrum of partners, including emergency management, the commercial sector, broadcasters, academia and social scientists, we can and will meet the nation's needs to overcome the very real threats from the increasing severity and frequency of weather and climate extremes."

Dr. Louis Uccellini, Director, National Weather Service

The NWS Staff

Meteorologist-In-Charge	Rick Dittmann
Administrative Support Assistant	Karrie Schmidt
Science and Operations Officer	Dean Hazen
Warning Coordination Meteorologist	Vern Preston
Electronic Systems Analyst	Rick Stork
Observation Program Leader	Gary Wicklund
Information Technology Officer	Jeremy Schulz
Service Hydrologist	Corey Loveland
Lead Forecasters	Dawn Harmon Jeff Hedges Mike Huston Bob Survick Dan Valle
General Forecasters	John HInsberger Greg Kaiser John Keyes Jack Messick Travis Wyatt
Meteorological Intern	Elizabeth Padian
Hydrometeorological Technicians	Paul Angel Dave Phelps
Electronic Technicians	Rich Denning Bryan Tilly